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**Baker, William; Czarnocha, Bronislaw**

**From arithmetic to algebra. A sequence of theory-based tasks.**

Czarnocha, Bronislaw (ed.) et al., The creative enterprise of mathematics teaching research. Elements of methodology and practice – from teachers to teachers. Rotterdam: Sense Publishers (ISBN 978-94-6300-548-7/hbk; 978-94-6300-547-0/pbk; 978-94-6300-549-4/ebook). 425-443 (2016).

Summary: The chapter deals with language in the mathematics classrooms, especially with mathematics remedial classrooms. It presents an unusual example of integrating two independent theories, the *A. Sfard* [Educ. Stud. Math. 22, No. 1, 1–36 (1991; ME 1992a.03697)] theory of reification and *R. G. Shepard* [J. Math. Behav. 12, No. 3, 287–93 (1993; ME 1995c.01410)] and *T. J. Shuell* [“Phases of meaningful learning”, Rev. Educ. Res. 60, No. 4, 531–547 (1990; doi:10.3102/00346543060004531)] integrated theory of cognitive development and writing categories. In the first cycle it’s the TR Design Type A, from Practice; it uses problem types designed through practice and supports itself by a standard yet simple statistical analysis.

*Classification:* C30 E40 F40 H20 H30

*Keywords:* mathematical language; teaching research; arithmetic; algebra  
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